

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings of claims in this application:

Listing of Claims:

1.(Currently amended) A magnetron of the type having a cathode and a surrounding anode, and a plurality of cavities defined by anode vanes comprising at least a first ring strap arranged generally around the cathode and in electrical contact with alternate ones of the vanes, the first ring strap having one or more protruding regions which protrude in a radial direction between the cathode and anode at one or more positions, each protruding region increasing capacitance so as to increase overall capacitance between the first ring strap and a second strap or between the first strap and anode vanes to which the first strap is not connected, the one or more protruding regions causing continuous localized variations in capacitance around the first strap.

2. (Original) A magnetron according to claim 1, wherein the one or more positions are between the anode vanes to which the at least first ring strap is connected.

3. (Previously presented) A magnetron according to claim 1, wherein the protruding regions protrude radially inwards.

4. (Previously presented) A magnetron according to claim 1, wherein the protruding regions protrude towards tips of the anode vanes.

5. (Previously presented) A magnetron according to claim 1, wherein the second strap generally is surrounded by the first ring strap, wherein the one or more protruding regions of the first ring strap protrude towards the second strap so as to increase the capacitance between the first and the second straps.

6. (Previously presented) A magnetron according to claim 1, wherein the one or more protruding regions are arranged to increase the capacitance for alternate vanes.

7. (Previously presented) A magnetron according to claim 1, wherein the one or more protruding regions are arranged asymmetrically around a portion of the at least first strap ring.

8. (Previously presented) A magnetron according to claim 7, wherein the one or more protruding regions are arranged on one half of the at least first strap ring.

9. (Previously presented) A magnetron according to claim 1, wherein the one or more protruding regions comprise deviations in the first strap ring itself.

10. (Previously presented) A magnetron according to claim 1, wherein the one or more protruding regions comprise thickenings of the first strap ring.

Claims 11-20 (Cancelled)

21. (Previously presented) A magnetron as claimed in claim 1, wherein the first strap has a plurality of protruding regions.

22. (Previously presented) A magnetron as claimed in claim 1, wherein the one or more protruding regions are substantially periodically spaced around at least a portion of the first strap.

23. (Previously presented) A magnetron as claimed in claim 1, wherein the first strap comprises an open ring.

24. (Previously presented) A magnetron as claimed in claim 1, wherein the second strap comprises a closed ring.

25. (Previously presented) A magnetron as claimed in claim 1, wherein the first strap is adjustable.

26. (Previously presented) A magnetron as claimed in claim 25, wherein the first strap is flexible.

27. (Previously presented) A magnetron as claimed in claim 1, wherein the second strap is in contact alternatively with others of the vanes.

28. (Previously presented) A magnetron as claimed in claim 27, wherein the second strap includes at least one protruding region.

29. (Previously presented) A magnetron as claimed in claim 1, including a plurality of straps, at least some of which have at least one protruding region.

30. (New) A magnetron of the type having a cathode and a surrounding anode, and a plurality of cavities defined by anode vanes comprising at least a first ring strap arranged generally around the cathode and in electrical contact with alternate ones of the vanes, the first ring strap having one or more protruding regions which protrude in a radial direction between the cathode and anode at one or more positions, each protruding region increasing capacitance so as to increase overall capacitance between the first ring strap and a second strap or between the first strap and anode vanes to which the first strap is not connected, the one or more protruding regions causing localized variations in capacitance, wherein the one or more protruding regions are arranged asymmetrically around a portion of the at least first strap ring.